

# MISSOURI CONSERVATIONIST

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# Vantage Point

## Rules and Regulations

Ever wanted to feed an alligator, hunt from a windmill or go tinker hunting? Missouri doesn't regulate those activities, but other states and countries do. History, local customs, and special circumstances directly influence hunting and fishing regulations.

For example, several southern states prohibit feeding alligators, or luring or enticing them with food (not that I ever wanted to hand-feed an alligator). In Saskatchewan it's illegal to hunt from a windmill without landowner permission. Newfoundland and Labrador residents can legally hunt turrs but not tinkers.

In case you are wondering, turrs and tinkers are short-necked diving seabirds. Turr hunting is a long-established tradition among native peoples in Newfoundland and Labrador.

Many early American settlers came from Europe, where kings and royalty often held claim to all the wildlife. Only the privileged and those they favored could hunt and fish. In America, however, wildlife resources belong to all the people. This does not mean that the taking of wildlife shouldn't be regulated. Before we had wildlife management agencies like the Conservation Department in each state, fish and wildlife populations in Missouri and most of the nation were in very poor shape due in part to overharvest.

Since the Conservation Department was formed in 1937, Missouri's Conservation Commission, the governing body of the Department of Conservation, has enacted *Wildlife Code* rules and regulations. The Commission acts on recommendations made following an annual review of Missouri's *Wildlife Code* by the Department's Regulations Committee. This system guarantees that wildlife regulations are based on science and research, and that wildlife populations are properly managed and protected.

*Wildlife Code* regulations can be divided roughly into three categories that often overlap. The first conserve and protect wildlife resources and the environment. Geography and habitat dictate which species of fish and wildlife are present in Missouri, and in what numbers, as well as the makeup of our forests. Scientific knowledge and research helps us to determine harvest levels, seasons and management strategies that will best protect and allow for wise use of these natural resources.

Another category of laws provides equal harvest opportunity for everyone. These include daily and possession limits, and regulations dealing with "fair chase." The third category is laws for the protection of people, such as requiring hunters to wear orange during certain seasons.



CLIFF WHITE

In Missouri, our regulatory process is flexible enough to change depending on current wildlife populations and management needs. For example, we've been able to greatly liberalize deer season regulations as deer numbers have rebounded from less than 400 in 1925 to about 1 million today. We have moved from closed seasons in the early years to a multitude of deer seasons that begin in mid-September and run into January. Turkey, waterfowl and other seasons also are adjusted based on the most recent population data.

The Conservation Department constantly challenges itself to keep regulations simple and understandable. This is a difficult task in the face of complex natural communities and competing needs from many sectors. However, the Conservation Commission and the Regulations Committee are dedicated to enacting rules and regulations to conserve our wildlife, protect wildlife habitat and make it safe and practical for people to enjoy our many natural resources.

**Dennis Steward, Protection Division Administrator**

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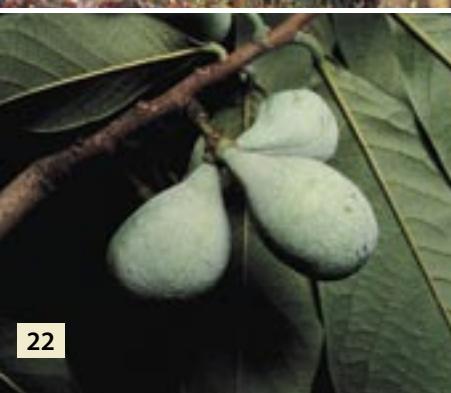
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# Reflections

## NATURAL PRAISE

After reading "Renaissance at Snake Ridge," I would like to express my admiration for Dick and Esther Myers for what they have done for our great state—and for nature!

*Catherine Gaines, Raytown*

## DRIVING ISSUES

I'm a school bus driver. To make sure we have a nice, quiet ride, I take old issues of the Missouri Conservationist to keep the young boys and girls occupied.

Thanks for the help.

*Eloise Morgan, Polo*

## MENTOR MEMORIES

The cover photo of what looked like a mother and daughter on your November issue brought to mind the importance of having an "outdoor mentor."

Thirty two years ago, I was introduced to the *Missouri Conservationist* by a seventh-grade art teacher, Tex Edwards. His frequent use of the magazine and other Department publications

in everyday lessons sparked an interest in the outdoors in many students.

Though not required by the curriculum, he took several of us camping on the banks of the Gasconade. I vividly remember cooking potatoes by campfire and looking for wolf spider eyes with a flashlight.

I am grateful to Ted and to the Conservationist for planting many good seeds.

*Captain Kevin Dodd,  
Alabama Department of Conservation  
and Natural Resources*

## THIN SQUIRRELS

I just finished reading "Scattergunning for Squirrels."

When I was young, I hunted squirrels with 12- and 20-gauge shotguns, but I could never get the knack of shooting them in the head.

Because the pattern spreads out, you have to know the distance, and at the edge of the pattern the shot is very thin, which makes the chance of a pel-

let hitting the squirrel in the head just as thin, or more so.

*William Black, San Mateo, Calif.*

## IN SEARCH OF TROPHIES

The little girl's remark, "Oh look, Grandpa! It's just a baby!" in your "Trophy Does" article reminds me of the 1971 deer season, when I was assisting at a biological check station in Van Buren.

We had a fellow bring in a deer on a motorcycle. The deer's legs were sticking out the side slits of his hunting coat. This drew the attention of lots of bystanders for the weighing and measuring.

The deer proved to be a button buck with some spots still visible. It weighed 23 pounds. One of the men declared that at least it would be easy to cook: "Split it down the backbone and fry each half in a skillet."

*George Fadler, Columbia*

"Trophy Does" was very interesting. I learned a lot about why deer do what they do. Knowing things like what you describe should make me a better hunter in the field.

You're right that bucks live the rut with their noses to ground. I never gave a thought as to how this might reduce the quality of the meat, but it only makes sense. It's very helpful to know what puts the best venison possible on the table.

*Jack Dotzman, Roach*

## HOTDOG!

I just love reading your magazine. It's the only one I can read from cover to cover and stay interested.

I began fishing when I was 20 and have continued for another 23 years. It is the only sport that is both exciting and serene at the same time.

About six years ago, I was introduced to catfishing, using hotdogs as bait. After I figured out how to use the drag on my ultra-light rod, I was catching 10- to 12-pound fish on 6-pound-test line. If you have never felt that kind



## SNOOPY SNAKE

Vaughn Owens, who works at Powell Gardens in Kingsville, took this photo of a northern water snake with a snail on its head. Vaughn said the snake could not shed the snail shell without help.

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of fight, I can tell you that it is a great experience, and that the thrill lasts for a long, long time.

*Rhonda Ruiz, St. Charles*

## HOG REFLECTIONS

I am a transplanted Missourian and recently read the article in the *Missouri Conservationist* concerning feral hogs and noted a mistake. Specifically, the article stated that the hogs "lack the reflective layer (tapetum) in their eyes that deer have, so their eyes don't shine when hit by artificial light."

Feral hogs are non-game animals here in Texas and may be hunted and taken by any means, to include "spot-

lighting." On the ranch where I hunt, we use red lights and hunt the animals at night. I can assure you that their eyes do reflect light. Many times they are outside visual range of the light, but you can see their eyes clearly through your scope.

We have far too many (33 of them in the road to my blind one evening this week), and they cause problems.

*Allen Rhodes, Seguin, TX*

*Editor's note: According to most sources, hogs do not have the reflective layer in their eyes. Some hunters report that red or blue lenses make a hog's eyes shine brighter.*

*The letters printed here reflect readers' opinions about the Conservationist and its contents. Space limitations prevent us from printing all letters, but we welcome signed comments from our readers. Letters may be edited for length and clarity.*

## Ask the Ombudsman



**Q:** We have a huge walnut tree in our yard. We've been told it's worth a lot of money because of its size, and we're not fond of the mess created by all the nuts in the fall. Can you recommend a logger who would be interested in cutting it?

**A:** Walnut lumber can fetch a good price. Unfortunately, due to this tree's location, you probably won't find anyone willing to bid on harvesting it. Loggers have a lot of expense just getting their equipment to a site. It would be rare for them to take a job for just one tree, and liability concerns at an urban site would be unappealing. Another potential drawback is that yard- or town-trees are notorious for containing foreign objects such as metal, clothes line, fence, gate hinges, etc. These items discolor the wood and make logging and sawing extremely dangerous.

Because of these issues you may have to consider hiring a professional to remove the tree. Another option may be collecting the nuts for personal use or selling them. For information on the latter, try a web search using the key words "black walnut" or contact your local Conservation Department office.

This site may be helpful for landowners interested in timber sales:  
[www.missouriconservation.org/forest/private/](http://www.missouriconservation.org/forest/private/).

*Ombudsman Ken Drenon will respond to your questions, suggestions or complaints concerning Conservation Department programs. Write him at P.O. Box 180, Jefferson City, MO 65102-0180, call him at 573/522-4115, ext. 3848, or e-mail him at <Ken.drenon@mdc.mo.gov>.*



**A** few years ago, after many years of looking, I purchased about 100 acres of land near Maramec Spring, between St. James and Steelville. I was as proud as a new father to own an Ozark garden of many oaks, hickories and dogwoods.

The previous owner had selectively logged the property less than a decade earlier. Some areas were so choked with new growth that I couldn't walk through them. As I learned later, this was not a bad thing. New growth offers wildlife food and shelter. A rejuvenating forest may not be as pretty as a mature oak forest, but it has its own subtle beauty.

My goal for my new property was to provide food and shelter for a diverse variety of wildlife. I also wanted to clean it up a bit. My task appeared formidable. The property was basically 99 percent woods and had no permanent water. It also was littered with discarded tree tops in various stages of decay.

My business experience taught me to "plan my work and work my plan." My first step was to formulate a comprehensive rehabilitation and management plan for my land. Mike Martin, a Private Land Conservationist with the Missouri Department of Conservation, helped me put my plan into action.

I cleared, limed, disced, fertilized and cultivated miles of walking paths. These paths are about 8 feet wide and contain orchard grass, spring oats, Korean lespedeza and ladino clover. It was important for wildlife not to consume all my planting efforts, and for spring rains not to wash them all away. So, in addition to hard work, I needed a little luck.

Thanks to hard work and that much appreciated good luck, I now have 400-yard green paths where before there was bare dirt, leaves, rocks and sticks.

Picture walking on these paths, surrounded by large oaks and hickories. In other areas, these grassy paths are bordered by thick

# Creating A Better Place For Wildlife

**It's become one of my heart-felt missions to make my "dream property" even better.**

by Mark Nikolaisen, photos by Jim Rathert



**The author walks along a cleared grassy path to work on his property. The paths allow access and viewing sites and provide habitat diversity.**



Wildlife appreciate the mix of grasses and clover.



Brushpiles provide cover for rabbits and small animals.



Native grasses thrive in an area opened by logging.



A watering hole attracts wildlife during dry periods.

vegetation fueled by full sun. There, you can see and hear colorful songbirds flying in and out of the brush.

I also had to deal with the expansive tops of the big trees that were logged by the previous owner, as well as cut logs that were left behind. I pushed these into ravines to slow runoff from hard rains. I cut others to speed their decay, and others I simply piled up and burned.

The many hand-made brushpiles near these grassy areas are important, too. Small lizards and other creatures are clearly visible where we never noticed them before. Ground-nesting birds also have more places to nest and raise their young.

Judging from wildlife tracks, browsed grass and droppings, deer and turkey appreciate the changes on my property. An abundance of insects in the grass are important food for young turkeys.

Other improvements to my property include a wildlife watering hole to provide water in the summer. I am still amazed at how quickly frogs found this new water, and at how quickly they populated it. The wildlife prints in the mud show many different visitors.

I've also attempted to create my own little bunch of prairies. They range in size from one-quarter acre to a half acre. Certain logged areas receive full sunlight, making them perfect locations for prairies. I planted them with sideoats gramma, little bluestem and Indian grass. It was challenging trying to broadcast these seeds because they are so light and fluffy. I used sand and kitty litter as seed carriers.

It takes years for these prairies to mature, but they will greatly benefit wildlife. That's the whole idea. When other grasses go dormant in the heat, these native grasses should grow strong. I cut no shorter than 8 inches, and I don't cut after August 1.

The most heavily logged areas are on rocky ground. There I've planted hundreds of saplings, especially shortleaf pines, the only pine tree native to Missouri. To help them grow, I fortified their roots with top soil and peat moss, then created a little dirt dish around the trunks to hold water. I topped it off with mulch and water.

At times, the deer and the late summer heat can be too much for the saplings. Some will perish, but the survivors will re-establish what we hope will be a healthy string of pine groves.

While it took considerable effort to get started, my conservation project requires surprisingly little maintenance. For the enjoyment it provides, the project has been well worth the effort. As I walk my paths, watching deer, turkey and songbirds I've never seen before, I believe the wildlife approves of my efforts, as well. ▲



Landowners can improve their property to attract more wildlife and to provide more scenic views.

## Labor of Love

Private Land Conservationist Mike Martin, who works in the Conservation Department's Ozark Region, helped Mark Nikolaisen formulate and implement a successful wildlife management plan on his property.

Mike provided the following notes on the project.

"Some of the forested areas on Mark's land were harvested and cut pretty hard before he purchased the property. Even though the harvest methods are not what we would have recommended, the thick regeneration areas are providing excellent habitat for a variety of wildlife species. A new generation of trees also has been released to perpetuate the forest.

"I suggested to Mark that he not try to remove the understory vegetation and to resist the urge to clean up too much of the logging debris on his property. Those brush piles he's making will make great habitat. All that material will be recycled in due time and will contribute nutrients to the flush of plant growth in the newly opened areas.

You should really anticipate some damage by deer to the tree seedlings that

you plant. That is just natural and is part of the process. Use tree shelters or tree guards on the special trees that you purchased and plant enough of the shortleaf pine so that the deer damage is manageable.

"I'm glad that he's working to control erosion. Keeping the thin Ozark soils in place is critical, and in the long run will lead to better plant growth and improved water quality.

"Like many landowners, Mark is in love with his property and is willing to do whatever it takes to make his land better for wildlife."

"Mark's success is a testimony to hard work and commitment. He didn't own heavy equipment that would have made the work easier. He had to complete most of it with handwork and elbow grease.

"You can't really call all the hard work he puts into it labor. Many absentee landowners can hardly wait until Friday, so they can exit the city and get out to the 'farm' to do what they really enjoy. Sometimes, it is really hard for them to go home on Sunday."



From right: Jacob, Bryan and Ben



CLIFF WHITE

# Youth Hunt

by Bryan Ross

When you bring kids and turkeys together, you have a good chance of forging a lifelong love of hunting.



JIM RATHER

Last year, during our local National Wild Turkey Federation Banquet, I gave a short program on turkey calling, and then answered questions about calling and hunting. Afterwards, a gentleman asked me if I would be interested in guiding some kids on their first turkey hunt as part of the NWTF's Jakes Program. I volunteered enthusiastically.

I would guide two boys, Jacob and Ben. The hunt was scheduled April 12-13 on property owned by James & Debbie McCurter. As the date grew closer, I grew a little concerned that I might not be the best guide for these two youngsters. It would be my first time guiding kids.

Jacob's hunt would take place the first day. The evening before opening morning, I took the boys out to see if we could roost a bird. We put several birds to bed but could not make one gobble.

## Jacob's Day

In the morning, Jacob and I, accompanied by James McCurter who carried a video camera to record the hunt, went to an area where turkeys like to strut after flying down. Turkeys were already gobbling on the roost when we arrived, but after flydown, they went silent.

After we moved to another area, I began to yelp, but a bird gobbled close and cut me off. We were trying to get to a saddle



**Jacob's hunting day lasted until past noon. We heard gobblers early, but they wouldn't approach close enough.**

ahead of the gobbler when a hen started yelping. There is no better place to be than between a live hen and a gobbling tom. So we stopped.

Jacob ended up with a close encounter with the hen. She would have run right past us to the gobbler had I not chased her away. I tried to cover her noisy retreat with some clucking and yelping. The gobbler didn't seem to notice. He just kept right on gobbling.

I called to that gobbler for about an hour, but he wouldn't come any closer. We decided to move again, but first we returned to the cabin for a late breakfast. By the time we got back into the woods, it was 12:30. Time was running out.

We eased down a logging road that snakes down a steep ridge into a long, narrow bottom that contained a large food plot. When we reached the food plot, three big gobblers on the other side of the food plot—not more than 40 yards away—just kind of faded into the woods.

James McCarter said he thought he knew where



**Jacob's bird was one of a group of three. He shot him from 12 yards away.**

BRYAN ROSS

those birds were going. We moved quickly and got into position. We hoped we could intercept them before time expired.

I staked out a jake decoy and told Jacob to sit in a spot where he could see the area from which we hoped the birds would approach. My first series of yelps did not get a response, so I launched into a second series. Birds behind and a little above us responded. We adjusted our setup to face their direction, and I called again. When

they gobbed, I knew they were coming.

James hid in a fallen treetop and had the camera ready. He held up three fingers and whispered that three birds were coming. I saw the birds about the same time and told Jacob to look over Mr. McCarter's head.

"Oh my gosh, I see them!" he whispered.

"Don't shoot until I tell you to," I commanded. I helped him move the gun barrel to a point past the end of the treetop, well away from our cameraman and host. "They

have to clear the treetop by at least that much before you can shoot," I told Jacob.

As we waited, I reminded him to aim at the red stuff on the bird's neck and to slowly squeeze the trigger when the time came.

The birds hung up near the treetop for a few moments while they looked at the jake decoy. Then they started forward.

I told Jake to pick out a bird and click his safety off. I told him to wait. The bird was getting ready to strut, and I really wanted Jacob to see it. He puffed into a strut right in front of Jake's gun barrel,

"OK, Jake, shoot him," I said. I think I may have gotten the "shoo" part out when his shotgun barked. At 12 yards lay Jake's first turkey. I pulled Jake's face mask down, took his shotgun and clicked the safety back on. I congratulated him and yelled, "Go get your bird!"

Jake stood up, took three steps and fell to his knees.

"My legs won't work!" Jake said. In a few moments he'd recovered from his excitement enough to go pick up his first turkey.

## Ben's Turn

April 13 dawned calm, crisp and cold. The frost on our boots from walking in the grass looked like white powder in the dim light. We found a good spot and staked out our small flock of decoys. We were sitting in the edge of a field about 200 yards from where the birds were roosted.

I was giving Ben some last-minute coaching when a turkey ended all talk with a thunderous gobble from the edge of the woods.

I sent out a few tree yelps. An old hen answered with a raspy assembly call while she was still sitting in the tree. The gobbler went berserk with another loud gobble. I called again and so did the hen, and the gobbler responded even more lustily. While this was going on, we also saw three gobblers sitting in the trees walking up and down the limbs, gobbling and strutting. Ben sat silently, transfixed by the greatest show on Earth.

One gobbler pitched out of the tree directly to the hen. Another hen pitched into the air. She landed and walked over to our hen decoys. I thought the other toms might fly to her and the decoys, but they left the area heading in about the same direction as the other tom. We waited and let things quiet down a bit.

A second group of turkeys farther up the ridge had gotten fired up, so we moved to get between the two



BRYAN ROSS

**Ben's first bird was a thick-bearded old tom. He'll be a turkey hunter forever.**

groups of birds. I talked back and forth with a gobbler from the first bunch of birds for a few minutes, but he wouldn't come any closer. However, the birds behind us became more interested. One gobbled at every third or fourth series of yelps. He was coming.

"Get ready, Ben," I said. "That bird could show up anywhere."

I called, and the bird gobbled about 60 or 70 yards to our left and a little behind us. I repositioned Ben quickly and then called again, but

got no response. Then I heard loud drumming coming from the direction where I last heard the bird.

Ben got his gun ready. I put its fore stock on my knee to help support it. The bird strutted and drummed for 15 minutes while advancing in baby steps.

Finally the bird was close enough. He pulled in his feathers and looked around for the hen he knew would be there, so I yelped softly to him.

Ben said, "I have a good shot now."

"Let him have it!"

Ben's shotgun roared, and he had his first turkey, a huge, thick-bearded old tom.

That weekend marked an important point in my life as a turkey hunter. Not only could I guide kids, but I could watch them grow. I think I got more out of the National Wild Turkey Federation's Jakes Program than Jacob and Ben. It gave me a chance to pass on my hunting heritage. ▲



CLIFF WHITE

**Ben waited for a clear shot before pulling the trigger.**



# The Genesis of Conservation in Missouri

BY JIM LOW

*In the beginning, there were determined citizen conservationists... There still are today.*

What Missouri organization formed in 1935, took politics out of conservation, secured stable, adequate funding for the nation's leading conservation program, and still keeps a watchful eye on the state's wild resources?

If you answered "The Conservation Federation of Missouri," go to the head of your class.

The Conservation Federation originated during the low point of conservation history. The Great Depression gripped America. Unregulated hunting, fishing and trapping, and unrestrained timber harvest, had decimated natural resources. Solutions were elusive.

Across the nation, state legislatures controlled game laws. Instead of protecting wildlife, laws often served the very interests that were responsible for despoiling wildlife resources. Hunters and anglers were disgusted, but their efforts at reform were thwarted in the political arena.

On Sept. 10, 1935, about 75 sportsmen met at a hotel in Columbia to discuss what could be done. They formed the Restoration and Conservation Federation of Missouri and envisioned a solution that was as simple as it was revolutionary.



*"If conservation can become a living reality, it can do so in Missouri. This is because Missourians, in my opinion, are not completely industrialized in mind and spirit, and I hope never will be."*

— Aldo Leopold, 1947

Newspaper publisher E. Sydney Stephens summed things up this way: "If you get a law passed, what have you got? The next legislature could repeal or amend it, and the politicians take over. By the same token, if you attempt to get a constitutional amendment through the legislature, you won't recognize it when it comes out. But if you write the basic authority exactly as you want it, put it on the ballot through the initiative and let the people vote it into the constitution, then you've got something permanent."

That sentiment inspired the group to draft Amendment 4. If passed, it would create a non-political conservation agency. Sportsmen fanned out across the

state and gathered signatures to put the proposal on the ballot. On Nov. 3, 1936, voters approved the measure by a margin of 71 percent to 29 percent. That was the largest margin by which any amendment to the state constitution to that date had passed.

It gave Missouri the nation's first non-political conservation agency. It would be governed by a four-person, bipartisan commission with exclusive authority over fish and wildlife.

Some legislators tried to get the measure overturned. Ultimately, the sportsmen's vision prevailed. Over the next 40 years, the "Missouri plan" allowed the Show-Me State to build what was universally acknowledged to be the nation's top conservation program, with decisions based on science instead of political pressure.

## HISTORY OF ACHIEVEMENT

America's brush with ecological disaster kindled a passion for wildlife stewardship. Aldo Leopold, who is known as the "father of modern conservation," noted that this zeal seemed to burn most intensely in Missouri.

Speaking at a gathering in 1947, he said: "Conservation, at bottom, rests on the conviction that there are things in this world more important than dollar signs and ciphers. Many of these other things attach to the land, and to the life that is on it and in it. People who know these other things have been growing scarcer, but less so in Missouri than elsewhere. That is why conservation is possible here. If conservation can become a living reality, it can do so in Missouri. This is because Missourians, in my opinion, are not completely industrialized in mind and spirit, and I hope never will be."

The Conservation Federation's growth confirmed Leopold's opinion. From the original 75 members, the Federation's ranks grew to the tens of thousands. It became known as "the strong right arm of conservation."

Forty years after its initial achievement of locking politics out of conservation, the Federation con-



The Conservation Federation played a pivotal role in the petition drive for the Design for Conservation, which helped fund the Conservation Department.

cluded that a broad, stable financial base was necessary for effective, long-range conservation efforts. Missouri's conservation agency received almost all of its funding from the sale of hunting, fishing and trapping permits. That was enough for minimal forest, fish and wildlife programs, but Federation members saw a need for better, more comprehensive resource management.

They believed Missourians needed a network of publicly owned areas where people could enjoy outdoor activities. Such areas also would preserve representative examples of the state's diverse ecological systems. They envisioned hundreds of public accesses where Missourians could reach the state's lakes and streams. They foresaw nature centers in urban areas where city dwellers could enjoy the natural world. They wanted all people to be stakeholders in nature so that they would want to protect it.

To achieve this bold conservation vision, the Conservation Federation produced another revolutionary idea. They proposed a one-eighth of 1 percent sales tax to be used exclusively by the Conservation Department.

Again, Federation members carried petitions to every corner of the state, and the public put the proposition on the ballot as a proposed constitutional amendment. In 1976, Missouri voters approved Amendment 1, establishing the permanent conservation sales tax.

Results of the sales tax are visible in every county today. Visitors from other states are amazed at the number of road signs marking conservation areas, boating accesses and community lakes.

## CONSERVATION WATCHDOG

The Conservation Federation functions as a watchdog to ensure the vitality of conservation in Missouri. It has internal committees to advise government agencies and represent conservation interests in the Missouri



JIM RATHERT

Dave Murphy (standing) and Rep. Charles Schlottach confer on legislation to aid Share the Harvest.



At Roubidoux Creek, then-Governor John Ashcroft receives a proclamation honoring Missouri's first Stream Team.

Legislature and Congress. Federation committees offer advice and, when necessary, flex conservation's political muscle. In 2004, when the Legislature considered revoking the conservation sales tax, Federation members packed a hearing room and convinced lawmakers it was a misguided idea.

## CFM's Resource Committees

The Conservation Federation maintains standing committees to serve the following interests.

- Archery & Bow Hunting
- Environment & Land Use
- Firearms, Hunter Safety & Sportsmen's Rights
- Fisheries & Water Resources
- Furbearers & Small Game
- Natural History & Wildlands
- Conservation Education & Youth Activities
- Deer & Wild Turkey
- Forestry
- Rivers & Streams
- Waterfowl & Wetlands

To learn more about the Conservation Federation, go to [www.confedmo.org](http://www.confedmo.org) or call 800/575-2322.

## CFM Successes

- Missouri Stream Team — After Missouri voters rejected the Natural Streams Act in 1989, the Conservation Federation launched this voluntary, citizen-based effort to achieve the same goals. The program now boasts 2,600 chapters with more than 50,000 individual members. Stream Teams conduct stream cleanups, monitor water quality and conduct other stewardship work on thousands of miles of creeks and rivers.
- Operation Game Thief — This Federation program operates a toll-free hotline where people can call to report poachers, and provides cash rewards for arrests.
- Project Forest Arson — This initiative allows citizens to call toll-free and report firebugs who destroy wildlife habitat, commercially valuable timber and private property.
- Share the Harvest — The Federation administers this program, which channeled 88 tons of venison from concerned hunters to needy Missourians last year alone.
- The Conservation Leadership Corps — This new initiative aims to mentor the next generation of citizen conservationists to carry on the Federation's proud tradition.



JIM RATHERT

Over the years, the Conservation Federation also has spawned some of the world's most innovative and successful citizen-action programs.

Most impressive about the Conservation Federation is that it has accomplished so much with so little. A paid staff of three serves the group's 30,000 members from a modest office near the State Capitol.

The Federation's strength resides in the passion and dedication of its members. As in 1935, today's Federation members are average citizens. They include blue-collar workers and professionals, industrialists and farmers, Democrats and Republicans, young and old. Differences aside, they all love nature, and they all love Missouri. They have always put aside philosophical disagreements to protect Missouri's natural heritage. People join the Federation to help conservation. Over time they develop friendships that make the group an extended family.

"When I sit in committee meetings, I am always impressed by the respect that people of very opposite backgrounds show for others' ideas and good intentions," said David Murphy, executive director of the Conservation Federation. "This is a unique place of synergy, where service to conservation is the most important thing."

## CHALLENGES AND OPPORTUNITIES

Despite its successes, the Federation has some serious challenges. One is name recognition.

"When most people hear about the Conservation Federation, they think we are the Conservation Department," Murphy said. "They don't realize that we are separate. That lack of recognition makes it hard to recruit members, and without members we can't do anything."

While 30,000 may sound like a lot of members, it really isn't when you consider the conservation challenges facing Missouri. It is even smaller compared to the number of Missourians who hunt, fish or enjoy other wildlife-based activities. Missouri has more than 400,000 deer hunters and more than 1 million anglers. Millions more hike, camp, feed birds and enjoy other nature-related activities.

"Imagine what we could do if even half those people joined us," Murphy said.

If someone tells you that times are tough, and that we can't afford the world's best conservation program, think back to the depths of the Great Depression. Things were much tougher then, but 75 visionaries decided that the nation's best conservation program was an investment that Missouri most needed. ▲



CLIFF WHITE

The Federation channels donated venison to needy families and charitable programs.



CLIFF WHITE

More than 50,000 people participate in the Missouri Stream Team Program, which was launched by the Federation.



# BACKYARD C.S.I.

There are no culprits or criminals—just a healthy  
mix of rabbits, deer, turkeys and songbirds. by Jeff Nichols

JIM RATHERT

**A**s a forensic crime scene investigator for the Columbia Police Department, I have investigated a variety of crime scenes. Each one presents new challenges.

I'm currently working on a scene, however, that is totally different from the criminal cases I investigate at work. This on-going investigation takes place in my own backyard.

Before I opened this case file, I had to do some background research on the subjects I may encounter. As with any investigation, it is important to learn as much as I can about the characters that are involved. Knowing where the suspects live, their survival needs and where they spend their time is valuable in any case. I also need to know where to get the answers to these questions.

## CASE INTRODUCTION

Ten years ago, my wife and I purchased five acres bordering the Columbia city limits where we would build our home. The scene was thick with cedar trees and underbrush, typical of regenerated farmland.

As I investigated the acreage, I found clues indicating high potential for improving wildlife habitat. As I made my way through the underbrush, I found red cedar, persimmon, black walnut, white and black oak trees, wild



PHOTOS BY JEFF NICHOLS



**Knowing where the suspects live, their survival needs and where they spend their time is valuable in any case.**



**An investigation reveals footprints, chewed nuts and other clues that wildlife appreciate brushpiles, food trees and other backyard amenities.**



Each day I go past the Scotch pines we've planted to see how they've grown. The family has grown fond of spotting wildlife, including fence lizards (below).

JEFF NICHOLS

plum, and a variety of native grasses. I envisioned clover strips, winter wheat plots, brush piles and wild blackberry thickets along nature trails. I couldn't wait to start my case work.

## RESEARCH

Over the years, I have accumulated many issues of the *Missouri Conservationist* magazine. I don't throw them away because they help me with habitat improvement, wildlife identification and many other conservation topics. I often visit the Conservation Department's web site at [www.missouriconservation.org](http://www.missouriconservation.org).

Another site, *Outdoor Endeavors* at [www.outdoorendeavors.com/state.htm](http://www.outdoorendeavors.com/state.htm), links to state fish and wildlife departments all around the country. Of course, you can always contact your local conservation agent, private land conservationist or county extension office for advice.

During my case investigation, I frequently used information from all these resources for guidance. A good detective should have lots of sources.

## ACTION TAKEN

I began clearing the underbrush with a chain saw for our first food plot. It was late winter, so I didn't have to contend with chiggers and ticks. Remember, you don't need acres of row crops to attract a variety of wildlife. You just need to supply a diversity of food and habitat.



As cedar posts accumulated, I crisscrossed them and piled cedar boughs on top. These brushpiles provide rabbits refuge from most predators. By late summer, I used our garden tiller to break up soil until it was suitable for planting fall wheat. Wheat is excellent winter food for deer, turkeys and rabbits, and it doesn't require a finely tilled seed bed to germinate. After the wheat matures in late spring, the seed heads fall to the ground and are more accessible to quail, doves and songbirds.

I also left standing any wildlife-friendly trees such as oak, ash, hickory, walnut, persimmon and a grove of wild plum trees for nut and fruit production.

The following February, I overseeded the young wheat with Ladino clover. I recommend broadcasting clover onto a moderately deep snow for two reasons. First, you can determine instantly if your seed is evenly distributed. Second, the moisture is beneficial when the snow melts. By spring, the clover began to emerge.

Soon I detected additional evidence of activity around this new planting in the form of deer tracks, turkey feathers and fresh droppings. When I walked, rabbits scampered into the brushpiles I built near the clover, and mourning doves flew out of the wheat patch into nearby trees.

The following fall I downloaded a seedling order form from the Conservation Department's web site. I purchased several bundles of wild blackberries and Scotch pines, which I planted the following spring. The blackberries were as much for me as for wildlife, because I love hot blackberry cobbler with a scoop of ice cream. Growing my own Christmas tree is more rewarding than buying one from a vendor, even though I planted far more trees than I will ever harvest.

## RESULTS

After a long day at the office, my wife and I often enjoy an exercise walk on our nature trail. We see a variety of songbirds flitting from tree to tree above us and occasionally glimpse a gliding barred owl. Many times we have walked up on grazing whitetail deer or wild turkey flocks near the clover. Every time I pass the young Scotch pines, I stop to see if they've grown from the day before.

Not only does our acreage help drive away stress from work and other pressures, but it also offers other rewards.

Before the 2003 spring turkey season, my 13-year-old son Gable and I built a hunting blind next to our clover plot. We used cedar boughs from our own trees. To my great joy, he harvested his first wild turkey gobbler the second week of the season. Our 7-year-old daughter, Aubrianna, loves searching for molted feathers, animal tracks in the mud or, her favorite, three-toed box turtles.

I grew up hunting and fishing in the Ozark Mountains when deer and turkeys were scarce. I don't recall anyone talking about managing for wildlife back then.

Only after I moved from my boyhood home did I realize that conservation works best when folks like you and me improve our land to benefit wildlife by planting wildlife cover, food plots or improving timber stands.

## CASE DISPOSITION

Over the years I have heard others say that wildlife management is the sole responsibility of the Conservation Department. That's like saying it's the sole responsibility of the police to deter and solve crime. Studies prove that community efforts really make a difference.

Even though investigating crimes scenes can be very interesting and rewarding, I always look forward to the conservation challenge in my own backyard. This is one case file I'll never close. The next time you hear C.S.I., think of those initials as meaning, "Conservation Serving Individuals." ▲

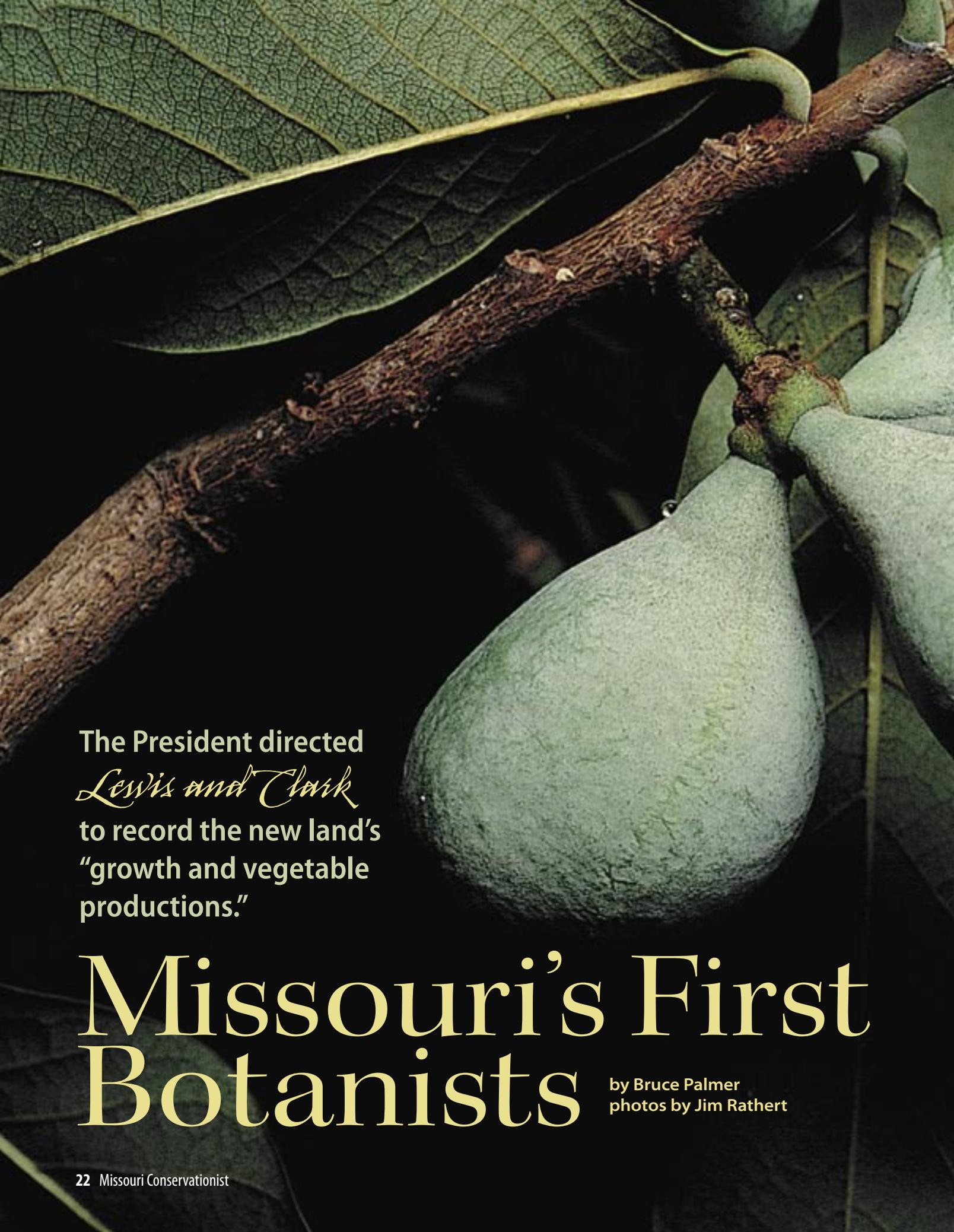


JIM RATHERT



JEFF NICHOLS

Our efforts to create wildlife habitat on our property have paid dividends in every season. Our investigation into new ways to help wildlife will never cease.



The President directed  
*Lewis and Clark*  
to record the new land's  
"growth and vegetable  
productions."

# Missouri's First Botanists

by Bruce Palmer  
photos by Jim Rathert



Pawpaws

ILLUSTRATIONS BY MICHAEL HAYNES

**L**n his written orders to Meriwether Lewis and William

Clark, President Thomas Jefferson referred to observing and collecting plants. He wrote, "Other object worthy of notice will be the soil & face of the country, it's growth & vegetable productions; especially those not of the U.S."

When writing this short sentence, Jefferson probably didn't realize the important role plants would play, both in the survival of the expedition and the eventual development of the West.



Meriwether Lewis

The skills of the two captains could not have been better matched.

Clark was a surveyor and cartographer. Lewis was a naturalist. Records show that Clark collected only one plant during the entire expedition, a white-margined spurge he found along the Yellowstone River in July 1806, when the two men were separated on the return trip. Otherwise, Lewis observed, collected, described and preserved all of the specimens.



William Clark



Lewis began studying botany at an early age. His mother was an herbalist in Albemarle County, Virginia, and she taught him the medicinal properties of plants. He used this knowledge to treat party members and natives for various maladies during the expedition. Lewis continued his studies when he became Jefferson's private secretary in 1801. Jefferson, one of the best naturalists in the country at that time, passed along his knowledge of botanical classification and nomenclature. To prepare for the expedition, Jefferson sent Lewis to Philadelphia for six weeks to study botany, navigation and medicine with members of the American Philosophical Society.

Equipped with wilderness skills, practical knowledge and numerous reference books, Lewis and Clark prepared for the two-year mission. They collected their first plant before they even left Camp Dubois, near present-day St. Louis. It was an Osage-orange. They sent a cutting to Jefferson from St. Louis on March 26, 1804. This Osage-orange was the first of 178 plants collected during the expedition that were new to science.

Of the 178 plants they discovered, 140 were from west of the Continental Divide. They likely described more

eastern species, but the expedition's collections from Fort Mandan to the Great Falls of the Missouri were destroyed by floods during the winter of 1805-06.

The plants found by Lewis and Clark were curiosities, but they were also necessary to their survival. Trees along the river provided fuel, shelter and wood for new masts, oars and dugouts. Near the present town of Waverly, Missouri, the party camped for two days to make 20 new boat oars from ash trees growing near the river.

Cottonwood was probably the most common tree they saw along the Missouri River. After collecting a packet of cottonwood seeds near La Charette, Lewis wrote, "this specimine is the seed of the Cottonwood which is so abundant in this country . . . this tree arrives at a great size, grows extreemly quick the wood is of a white colour, soft spongy and light, perogues are most usually made of these trees..."

Despite its "soft spongy" wood, expedition members used cottonwood to make dugouts and masts. They even built Ft. Mandan—their 1804 winter home—from cottonwood cut along the river.

In addition to building materials, plants provided food for the members of the Corps of Discovery. Many of the explorers were sick before they even made it across present-day Missouri. Clark speculated their illnesses were caused by the water they drank. Actually, the cause was what they were eating, or not eating. Their high-protein meat diet lacked fruits and vegetables. As the summer progressed, the men anticipated the ripening of wild fruits and nuts. Plums, pawpaws, cherries, grapes, raspberries, persimmons, walnuts and hickory nuts found along the river gave them a more varied diet.

Lewis's detailed journal entries on the plants he collected included the date and place he found them,



descriptions of the plants and if the native people used them for food or medicinal purposes. Common lomatium was, for example, "A great horse medicine among the natives."

Of the mariposa lily, Lewis wrote, "A small bulb of a pleasant flavor, eaten by the natives." He was less impressed with sticky currant, saying, "fruit indifferent and gummy."

The group probably wished they had avoided certain plants, particularly camas. After nearly starving as they crossed the Lolo Trail, the men gorged themselves on dried salmon and camas roots supplied by the Nez Perce. Clark's journal reads, "I find myself verry unwell all the evening from eateing the fish & roots too freely." The next day was not much better, judging from this entry: "Capt Lewis Scercely able to ride a jentle horse... Several men So unwell that they were Compelled to lie on the Side of the road for Some time..."

Even under life-threatening circumstances, the pair relentlessly recorded new findings. They collected about one-third of the new plants, 55, in Idaho when they were

## "Muskeetors"?

Almost anyone can spot lots of spelling errors in the journals of Lewis and Clark. The two also capitalize words in the middle of sentences, run sentences together or fail to make complete sentences, and commit numerous other grammatical and punctuation errors.

Although they were masters of many skills, Lewis and Clark were not well educated. During his teens, Lewis studied a few years with a private tutor, but Clark never had any formal schooling. The two were considered literate, but standardized dictionaries were not yet available. Many people just spelled words the way they sounded.

It's also important to remember that the journals that survived were just notes jotted down by firelight, or while traveling down the river or trekking through a forest. They were never cleaned up and edited for publication.

Because the words were written down phonetically, we actually have the opportunity to "hear" words as Lewis and Clark and other expedition members would have said them. When we read, "muskeetors," for example, it tells us how people at that time pronounced the word mosquitos.



Persimmons

struggling to cross the snow-covered Lolo Trail.

During the long winter at Fort Clatsop, Lewis and Clark caught up on their map making and journal entries. Lewis wrote at length about edible plants and the great conifers of the region, such as Douglas-fir, western hemlock, grand fir, western white pine and Sitka spruce. He reported the Sitka spruce “grows to imence size...in several instances we have found them as much as 36 feet in the girth or 12 feet diameter perfectly solid and entire, they frequently rise to the hight of 230 feet, and one hundred and twenty or 30 of that hight without a limb.”

The local Indians' diet included the edible roots of many plants, including thistle, horsetail, western bracken, cattail and wappato. Lewis said they most favored the roots of wappato plant. The wappato bulb is

about the size of an egg and, according to reports, when roasted tastes much like a potato. Native women gathered it from swampy places where it grew. They waded into water sometimes up to their necks and loosened the bulbs with their feet. When the bulbs floated to the surface, they tossed them into their canoes.

Douglas-fir, purple coneflower, Lewis's wild flax, Pacific yew, camas and cottonwood are just a few of the plants recorded during their mission that we use today for food, fiber, medicine and shelter.

The discoveries made by the Lewis and Clark Expedition greatly increased our knowledge of western botany and helped encourage development of the West. Many of the plants they discovered and described were new species, and a few became members of new genera, *Lewisia* and *Clarkia*. ▲

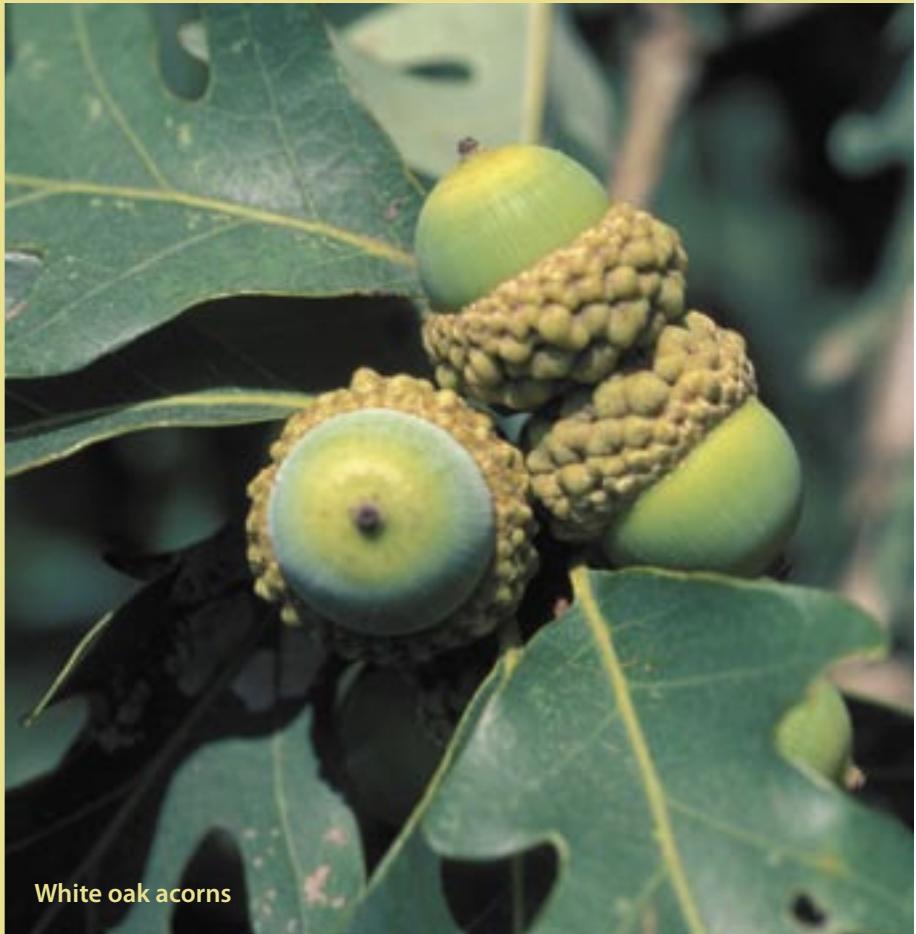




Elderberries



Wild grapes



White oak acorns



ANNUAL  
REPORT  
Fiscal Year 2004  
MISSOURI

This summary of the Annual Report highlights the Conservation Department's financial transactions and year-long accomplishments from July 1, 2003, through June 30, 2004. The Conservation Department made \$667,032 in payments to Missouri counties in lieu of taxes, and also reimbursed counties \$286,452 for land enrolled in the Forest Cropland Program.

**Improved Trout Management:** Department staff completed a "Plan for Missouri Trout Fishing." This included implementing a new, statewide, minimum length limit for brown trout, and increasing the number and size of trout stocked. Changes to length limits, daily limits and other fishing restrictions are planned for a number of trout areas. Winter trout fishing opportunities in the cities of Columbia, Jefferson City and Jackson will be expanded.

**Volunteer Water Quality Monitoring:** The Stream Team Volunteer Water Quality Monitoring Program trained 367 volunteers in 30 Water Quality Monitoring workshops across Missouri during fiscal year 2004. A total of 1,352 data sets on stream surveys, water chemistry and invertebrates were submitted to the sponsoring agencies.

Rural fire departments received help through training and grants. More than \$380,988 was distributed to 188 fire departments for the purchase of safety and fire fighting equipment. The Department trained volunteer firefighters on wildland fires.

**New Community Assistance Program Agreements:** This program creates fishing and boating opportunities at more than 130 lakes and 41 stream access areas around the state. In 2004, new lakes in Macon County, and in the cities of St. Charles, Jennings and Marceline, came under cooperative management, as did river accesses in Lexington and in Pemiscot County.

**Sturgeon Management:** Department biologists established a program to assist federal authorities in monitoring sturgeon abundance, movement and harvest to protect sturgeon populations in Missouri. Department hatcheries are producing pallid and lake sturgeon to help restore populations of these species in Missouri's big rivers.

**Catfish Management:** A statewide Catfish Management Plan includes objectives to diversify catfish fishing opportunities and to gather more information to improve management of catfish. Recommendations include establishing separate, statewide daily creel limits for channel catfish and blue catfish; and establishing a special flathead catfish management area on the Missouri River in central Missouri.

More than 400 Missouri communities received help for local tree resources, with \$280,000 in grants being allocated directly to 39 municipalities and public schools through the Tree Resource Inventory and Management — TRIM grant program.

**Expanded Deer Hunting Opportunities:** for firearms hunters by establishing an Urban Portion of the firearms season, increasing the number of counties open during the Antlerless Portion of the season, increasing the number of counties open to Antlerless Deer permits, allowing hunters to purchase and fill any number of Antlerless permits, and expanding the number of resident landowners who qualify for no-cost permits.

**Managed Deer Hunt Program:** The Department provided additional deer hunting opportunity through the Managed Deer Hunt Program. Overall, 5,713 hunters harvested 2,186 deer during 71 hunts at 39 locations.

**Dove Hunting Opportunities:** The Conservation Department continues to actively manage for doves on many conservation areas. Mixed plantings of sunflowers, wheat, millet, buckwheat and corn provide varied types of hunting opportunities.

Resource Science Division was involved in more than 150 research, survey and monitoring activities that resulted in 320 technical presentations, 57 workshops and 45 technical publications. These were enhanced by cooperative projects with eight universities and state and federal agencies and supplemented by nearly \$1 million in outside funding and more than \$6 million in partner support.

Private Land Service's staff made over 4,700 on-site landowner visits to provide technical assistance for fish, forest and wildlife management. A total of 303 workshops and meetings provided conservation information to about 65,000 individuals. In addition, assistance was provided to communities, urban planners and developers in metro areas to help integrate conservation with urban growth.

**Improved Deer Management:** Antler point restrictions in pilot counties and a focus on harvest of antlerless deer were designed to increase our capacity to manage Missouri's deer population. Pilot efforts in checking deer by telephone show promise for more convenient and efficient tallies of harvest totals.

Department staff provided national leadership in research on trap standards and cable restraints, mourning dove harvest management, coordinated bird monitoring, waterfowl harvest strategy, communicating invasive species challenges, and an assessment of public use on the Missouri River.

**Stream Teams:** Missouri Stream Team volunteers contributed nearly 100,000 hours to conserving Missouri's stream resources. Stream Teams contributed more than 40,000 hours for litter pickups and more than 13,000 hours of water quality monitoring. The Stash Your Trash Program distributed nearly 270,000 trash bags to Stream Teams and float outfitters, preventing an estimated 1,300 tons of trash from entering Missouri streams.

## What the Money Bought — Fiscal Year 2004

**Forestry — \$14,235,963** Conservation Department programs foster a healthy and growing forest resource. Examples include distributing 6.3 million seedlings for planting to nearly 13,000 landowners, developing 160 Landowner Forest Stewardship Plans, bringing an additional 29,000 acres under total resource management, managing 438,700 acres of public forest land, developing the state's forest industry and conducting research on trees and forests.

**Wildlife — \$14,479,161** Conservation Department programs ensure wildlife populations that are in harmony with habitat and human enjoyment. Managed 513,776 acres of public land and conducted programs to monitor game and non-game species, develop wetlands, and restore wildlife.

**Fisheries — \$10,801,408** Fishing is one of the most popular outdoor activities in Missouri. In 2003, the Conservation Department sold 1,382,219 resident and non-resident fishing permits and tags of all types to 851,518 people. The agency produced 5,493,761 fish for stocking in various waters. The Conservation Department manages 870 public impoundments totaling 277,425 acres of water.

**Resource Science — \$10,662,262** Provided the science-based information needed to effectively manage Missouri's natural resources. Resource Science monitors the status of Missouri's forests, fish, and wildlife, recommends conservation actions, evaluates these actions, and reports the results. In addition to surveys of fish and wildlife, more than 200,000 Missourians were contacted to determine their outdoor activity and opinions about conservation programs.

**Law Enforcement — \$13,294,140** Paid for law enforcement, resource management, information, education and public service contact activities conducted by 167 conservation agents. Conservation agents, along with 2,200 volunteer instructors, conducted 1,072 Hunter Education classes, certifying 20,046 students.

**Outreach and Education — \$15,223,426** Sustained and nourished Missourians' connection to the outdoors by providing educational materials, schoolteacher contacts, outdoor skills programs, the *Missouri Conservationist* magazine, TV show, books, videos, informational programs, staffed shooting ranges and Conservation Nature Centers.

**Private Land Services — \$6,027,527** Delivered resource education and technical assistance to private landowners to conserve forest, fish and wildlife resources.

**Administration — \$2,991,907** Paid for general expenses and equipment, auditor, legal counsel, planning, environmental coordination, local government assistance, summer help and other administrative functions.

**Administrative Services and Human Resources — \$28,830,801** Paid for human resources, federal reimbursement administration, hunting and fishing permit point-of-sale system, fiscal services, distribution center, print shop, building and grounds maintenance, and information management and technology. Also includes other agency appropriations, department-wide equipment and other essential services.

**Land Acquisition, Landowner Assistance, In-Lieu Taxes — \$4,656,174** In Lieu of Tax and forest cropland payments, which included levee and drainage district taxes, totaled \$953,484 to 113 counties. The four largest payments were to Shannon (\$78,347), St. Louis (\$50,266), Holt (\$32,735), and Howard (\$30,890) counties. Since 1980, more than \$10.11 million has been returned to Missouri counties under the Payment in Lieu of Taxes program.

**Construction & Development — \$12,939,215** Work included fish hatchery improvements, development of nature centers, river accesses, wetlands, shooting ranges and renovation and repair of facilities statewide.

**Design and Development — \$10,795,902** Paid for engineering, architectural and construction services.

**General Region Expenditures — \$3,943,120** Expenditures for the regions that are not specific to any one division.

### Receipts

	
Conservation Sales Tax .....	\$93,488,139
Permit Sales .....	\$30,592,207
Federal Reimbursements .....	\$15,401,295
Sales and Rentals .....	\$7,579,996
Interest .....	\$589,553
Other Sources .....	\$3,542,080
Total Receipts .....	\$151,193,269

### Disbursements

	
Construction & Development .....	8.7%
Wildlife .....	9.7%
Forestry .....	9.6%
Administrative Services & Human Resources .....	19.4%
Protection .....	8.9%
Outreach & Education .....	10.2%
Fisheries .....	7.3%
Design & Development .....	7.3%
Land Acquisition/in-Lieu of Taxes .....	3.1%
Private Land Services .....	4.0%
Resource Science .....	7.2%
Administration .....	2.0%
General Region Expenditures .....	2.6%
Total Cash Disbursements .....	\$148,881,005

### Missouri State Budget

	
Health & Social Services .....	37.1%
Education .....	28.7%
Government Services .....	20.3%
Transportation .....	9.9%
Natural & Economic Resources .....	3.4%
Conservation .....	0.7%
Total State Budget .....	\$18,763,141,569

*(MDC less than 1% of total state budget)*



## COLUMBIA BOTTOM CONSERVATION AREA: Confluence of art and nature

Columbia Bottom Conservation Area is where the Missouri and Mississippi rivers come together, and where art and the outdoors meet.

The Missouri Department of Conservation has built nine "Exploration Stations" that highlight the habitats of Columbia Bottom Conservation Area. The exploration stations include colorful informational panels as well as mosaic work by two St. Louis artists, Catherine Magel and Mort Hill. The mosaics include stone, glass and hand-made ceramic pieces. These works of art enhance the site and help visitors understand the value of floodplain habitats.

The curving, S-shaped, concrete walls of the exploration stations mimic the flow of the Mississippi and Missouri rivers. The stations are located within the habitat they interpret. Graphic panels explain management practices used, such as regulating the water flow in wetlands and prescribed fire for prairies. Vibrant images showcase species from each habitat.

A "Passport Book," available from the visitor center, will guide you through each habitat. You can make rubbings from a piece of the mosaic at each station to stamp your passport book.

Sidewalks to the exploration stations are wide, fairly level and ADA accessible. —*Krista Kovach*

## Three birds with one stone

The Conservation Department wants some work done. It also wanted to help city residents connect with nature. To accomplish both goals at the same time, the Department worked with the Missouri Mentoring Partnership. The two groups then worked with the Missouri Division of Youth Services, the Bootheel Youth Museum and the East Missouri Action Agency to identify youngsters who would benefit from mentoring.

As a result, three supervised crews of young men and women built trails, planted trees and built birdhouses for eight weeks last summer. They worked in the Cape Girardeau, New Madrid and Marble Hill areas. Their biggest project was converting an old baseball field to a sand prairie.

The program was created in 2000 by the Missouri Legislature, but it was never funded. The Conservation Department liked the idea of a Youth Service and Conservation Corps so much that it used money from its outreach and education and diversity programs to implement it.

Planning is under way for the program's second year, when five crews totaling 50 youths will work in the same areas, and at Malden and Scott City. —*Phil Helfrich*

## Tree and shrub seedlings are a bundle of fun

If you are nutty for wildlife, or if you think birds are simply the berries, you ought to visit the Conservation Department Web site and order some tree or shrub seedlings. George O. White State Forest Nursery is open for business.

You can order seedlings through April 30 at <[www.missouriconservation.org/forest/nursery](http://www.missouriconservation.org/forest/nursery)>. You can choose from 12 species of oak trees, six species of pines as well as black walnut, pecan and more than 20 shrub species.

Regular plant bundles contain 25 seedlings and sell for \$3 to \$12 per bundle. This year, for the first time, you will be able to buy elderberry plants. Water tupelo and buttonbush, offered for the first time last year, are again available.

Blackberry seedlings are especially plentiful this year, making it easy for landowners to ensure food for birds and pies for themselves. Also abundant are hazelnut seedlings, which have been scarce in recent years.

Special bundles available this year include:

- The Conservation Bundle, with five seedlings of each of six species.
- The Wildlife Cover Bundle, with 10 seedlings of each of five species.
- The Large Nut Tree Bundle, with 15 large seedlings each of pecan and black walnut.
- The Quail Cover Bundle, with 10 seedlings of each of five species.

Special bundles sell for \$12 to \$16.



## NEW TROUT PLAN HAS SOMETHING FOR EVERYONE

On March 1, the Conservation Department will enact a new trout stream management plan that will designate Blue-Ribbon, Red-Ribbon or White-Ribbon areas.

Parts of large, cold rivers with the best trout habitat and smaller streams

capable of supporting naturally reproducing rainbow trout populations are designated Blue-Ribbon areas. In these areas, length and creel limits will be restricted to allow the maximum number of brown or rainbow trout to grow to trophy size. The length limit

on those waters is 18 inches, and anglers can keep only one fish per day. Parts of the Current, Eleven Point and North Fork rivers; and Crane, Barren Fork, Blue Springs, Little Piney, Mill and Spring creeks are among those that will be designated Blue-Ribbon areas.

Red-Ribbon areas also have high-quality trout habitat. However, some factors, such as limited cover or seasonal temperature increases, limit trout growth or survival. In such areas, the Conservation Department will use slightly less strict harvest regulations to provide catch-and-release fishing with a chance of catching large trout. Anglers will be able to keep up to two trout that measure 15 inches or longer per day. Red-Ribbon areas include the Maramec River and Roubidoux Creek, and parts of the North Fork River.

White-Ribbon waters can support trout populations year-round. These will be stocked mostly with rainbow trout under the new plan. The stocking will include some brown trout and a limited number of large- to trophy-sized trout not needed for brood stock at hatcheries. There will be no length limit on rainbow trout in White-Ribbon streams, and the daily limit will be four trout. This will appeal to anglers who want to take home what they catch. A 15-inch minimum length limit will apply to brown trout in areas where they are stocked.

Beginning March 1, a new statewide daily limit of four trout will take effect. A new statewide minimum length limit of 15 inches on brown trout caught from streams also becomes effective March 1.

For more details, visit <[www.missouriconservation.org/fish/sport/trout/](http://www.missouriconservation.org/fish/sport/trout/)>.

## RV show at America's Center

"North to Alaska" is the theme for the 28th Annual St. Louis RV Camping and Travel Show Jan. 20 - 23 at the America's Center in St. Louis. The event features exhibits and seminars focusing on traveling to and through Alaska. Documentary films titled "Alaska's Inside Passage" and "Alaska RV Adventure" will be shown daily. Information also will be available about traveling Alaska by rail and cruise ship. As always, the show will include hundreds of recreational vehicles and displays of nearby RV travel destinations. For more information, visit [www.stlrv.com](http://www.stlrv.com) or call 314/355-1236.



## Bowhunters to meet in Jefferson City

The United Missouri Bowhunters will hold their annual festival Feb. 4 - 6 at the Jefferson City Ramada Inn.

The event features hunting-related seminars, displays by archery equipment dealers and custom bow makers, exhibits of mounted game animals, archery equipment raffles, a silent auction and a photography contest. Visitors are welcome. For more information, contact Doug Morgan, 5133 Brin Ridge Dr., High Ridge, MO 63049, <[averagearcher14@aol.com](mailto:averagearcher14@aol.com)>.

## HABITAT HINT: Create a winter haven for wildlife

Lining a lawn with bird feeders is one way to attract birds during the winter. Lining it with native plants and shrubs that produce berries or seeds is another.

Now is the time to evaluate your yard's value to wildlife in winter. Does it provide high-energy food, reliable water sources and safe shelter? If not, consider adding smooth sumac, burning bush, American bittersweet or other native plants to your landscape.

At least 32 species of birds, including bobwhite quail, eat the fruit of smooth sumac. Cottontail rabbits and white-tailed deer consume the shrub's leaves and twigs, and small mammals use the plants for cover.

Smooth sumac also is a beautiful ornamental shrub. It produces dense clusters of white flowers from late May to July, bright red clusters of fruit and brilliant autumn foliage.

Wahoo, or burning bush, is another welcome addition to home landscapes. Many species of birds devour its fruit, and it produces colorful berries and scarlet autumn leaves.

If you have room for a sprawling plant, consider American bittersweet. This aggressive vine drips with ornamental clusters of orange fruit that split open to display bright red seeds. The fruit persists into winter, adding color to drab winter days and providing food for wildlife. Cottontail rabbits, fox squirrels and at least 15 species of birds eat bittersweet fruit.

To find more Missouri native shrubs, vines and trees that provide winter food for wildlife, visit the *Grow Native!* web site at <[www.grownative.org](http://www.grownative.org)>. Click on "Native Plant Info," then "Plant Search." — Barbara Fairchild



## Outdoor Calendar

Hunting	open	close
Coyotes	5/10/04	3/31/05
Crow	11/1/04	3/3/05
Deer/Turkey, Archery	11/24/04	1/15/05
Furbearers	11/15/04	2/15/05
Groundhog	5/9/05	12/15/05
Pheasants		
North Zone	11/1/04	1/15/05
Quail	11/1/04	1/15/05
Rabbits	10/1/04	2/15/05
Ruffed Grouse	10/15/04	1/15/05
Squirrels	5/22/04	2/15/05
Turkey (spring)	4/18/05	5/08/05
Waterfowl	varies by zone	

### Fishing

Black Bass (most southern streams)	5/22/04	2/28/05
Bullfrog	sunset	midnight
	6/30/05	10/31/05
Nongame Fish Snagging	3/15/05	5/15/05
Nongame Fish Stream Gigging	9/15/04	1/31/05
Paddlefish	3/15/05	4/30/05
Paddlefish on the Mississippi River	3/15/05	5/15/05
Trout Parks		
catch and release (Fri.-Sun.)	11/12/04	2/13/05

### Trapping

Beaver	11/15/04	3/31/05
Furbearers	11/15/04	2/15/05
Otters and Muskrats	11/15/04	varies

See regulations for otter zones, limits and dates

For complete information about seasons, limits, methods and restrictions, consult the Wildlife Code and the current summaries of Missouri Hunting and Trapping Regulations and Missouri Fishing Regulations, the Fall Deer and Turkey Hunting Information, Waterfowl Hunting Digest and the Migratory Bird Digest. To find this information on our Web site go to <<http://www.missouriconservation.org/regs/>>.

The Conservation Department's computerized point-of-sale system allows you to purchase or replace your permits through local vendors or by phone. The toll-free number is 800/392-4115. Allow 10 days for delivery of telephone purchases. To purchase permits online go to <<http://www.wildlifelicense.com/mo/>>.



**OPERATION  
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1-800-392-1111

## AGENT NOTEBOOK

### All law enforcement

officers, including Conservation Agents, sometimes issue citations to those folks caught breaking the law. Most citations written by Conservation Agents are for fish and game violations, littering, trespass and vandalism.

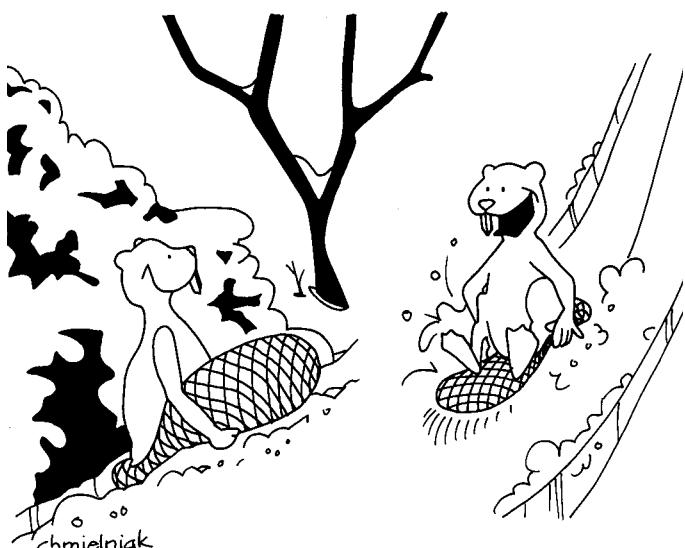


People convicted of conservation charges are required to pay fines and court costs. Many of the people I talk to believe that the money collected from these fines go to the Conservation Department. Others believe they go to the state general fund.

Neither the Conservation Department nor the State sees a penny of the fines paid. In fact, the fine money collected from conservation cases goes to school systems in the counties where the tickets were written. The court costs go to the court systems.

People also seem to believe that Conservation Agents are required to write a certain number of tickets each month to meet a quota. In fact, agents are not required to write any number of tickets. If a violation warrants a ticket then one is issued. In a perfect world, we'd prefer never to issue a ticket.

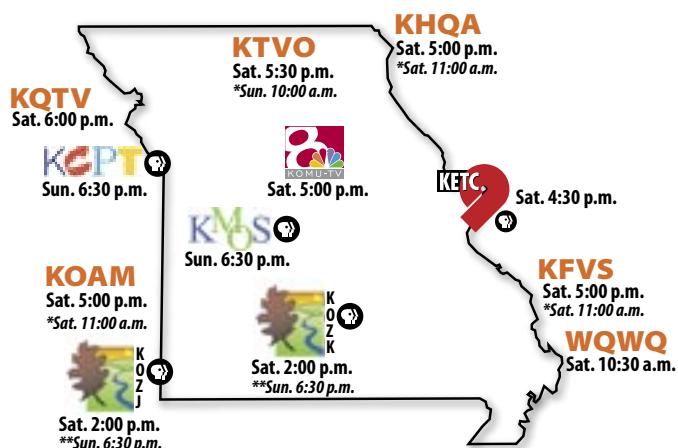
When you hear someone complaining about getting a ticket from a Conservation Agent, or maybe if you received a ticket, keep in mind that we only give tickets when there is a clear violation. The only plus-side to the tickets we issue is that the fines paid always go to a good cause. — R. Shannon Smith





# Program Schedule

Television the way Nature intended!



\*Alternate time if pre-empted by other programming

\*\*starting Feb. 6

<b>St. Louis</b>	KETC	(Ch 9 PBS)	Sat. 4:30 p.m.
<b>Kansas City</b>	KCPT	(Ch 19 PBS)	Sun. 6:30 p.m.
<b>Springfield</b>	KOZK	(Ch 21 PBS)	Sat. 2:00 p.m. Sun. 6:30 p.m. **
<b>Warrensburg</b>	KMOS	(Ch 6 PBS)	Sun. 6:30 p.m.
<b>Joplin</b>	KOZJ	(Ch 26 PBS)	Sat. 2:00 p.m. Sun. 6:30 p.m. **
	KOAM	(Ch 7 CBS)	Sat. 5:00 p.m.
<b>Cape Girardeau</b>	KFVS	(Ch 12 CBS)	Sat. 5:00 p.m.
	WQWQ	(Ch. 9/24 UPN)	Sat. 10:30 a.m.
<b>Columbia</b>	KOMU	(Ch 8 NBC)	Sat. 5:00 p.m.
<b>Hannibal</b>	KHQA	(Ch 7 CBS)	Sat. 5:00 p.m.
<b>Kirksville</b>	KTVO	(Ch 3 ABC)	Sat. 5:30 p.m.
<b>St. Joseph</b>	KQTV	(Ch 2 ABC)	Sat. 6:00 p.m.

## OTHER OUTLETS

<b>Branson</b> Vacation Channel	<b>Raytown</b> City of Raytown Cable
<b>Brentwood</b> Brentwood City TV	<b>St. Charles</b> City of St. Charles-Ch 20
<b>Cape Girardeau</b> Charter Cable Ed. Ch. 23	<b>St. Louis</b> Charter Communications
<b>Chillicothe</b> Time Warner Cable Channel 6	<b>St. Louis</b> City TV 10
<b>Hillsboro</b> JCTV	<b>St. Louis</b> Cooperating School Districts
<b>Independence</b> City 7	<b>St. Louis</b> DHTV-21
<b>Joplin</b> KGCS	<b>St. Louis</b> KPTN-LP/TV58
<b>Kearney</b> Unite Cable	<b>St. Peters</b> City of St. Peters Cable
<b>Mexico</b> Mex-TV	<b>Ste. Genevieve</b> PublicTV
<b>Noel</b> TTV	<b>Springfield</b> KBLE36
<b>O'Fallon</b> City of O'Fallon Cable	<b>Sullivan</b> Fidelity Cable-Channel 6
<b>Parkville</b> City of Parkville	<b>Union</b> TRC-TV7
<b>Perryville</b> PTV	<b>West Plains</b> OCTV
<b>Raymore</b> Govt. Access-Channel 7	

# Meet Our Contributors



**Jim Low** is the Conservation Department's print news coordinator. He considers the dues he pays to the Conservation Federation of Missouri each year the best conservation investment he makes.



**Jeff Nichols** is a detective specializing in forensics for the Columbia Police Department. He lives east of Columbia with his wife, Diana, son, Gable, and daughter, Aubrianna. He said working to improve wildlife habitat on the acreage surrounding the family home is very therapeutic.



**Mark Nikolaisen** lives in Chesterfield with his wife, Laura, daughter, Tori, and son, Lucas. He said his respect and appreciation for wildlife and the outdoors comes from family members and friends who have shared their knowledge over the years.



**Bruce Palmer** is a fire training coordinator at the Conservation Department's headquarters in Jefferson City. He became interested in the trees along the Lewis and Clark trail after a 2003 fire assignment at Lolo Pass, the place where Lewis and Clark crossed the Bitterroot Mountains.



**Bryan Ross** lives in Walnut Ridge, Ark., with his wife and son. He has turkey hunted for 18 years and hunts numerous states each spring. He enjoys competing regularly on the turkey calling circuit and guiding kids, as well as novice and experienced turkey hunters.



To learn about bobwhite quail management and Missouri's quail recovery efforts, check out [www.missouriconservation.org](http://www.missouriconservation.org)  
Keyword: quail



## **Sycamore**

Stark white and skeletal, sycamore trees are strikingly attractive during winter. The ball-like fruits yield seeds for a variety of birds, such as wintering purple finches. Wood ducks often nest in hollow sycamores —*Jim Rathert*